VALUE CHAINS IN THE SPANISH FRESH SEAFOOD MARKET

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Market access and value-chains in fisheries and aquaculture

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Sources of seafood supply in Spain

**2000**
- Catches: 34.57%
- Aquaculture: 9.97%
- Imports: 55.46%

**2009**
- Catches: 25.56%
- Aquaculture: 8.86%
- Imports: 65.58%

<table>
<thead>
<tr>
<th>Year</th>
<th>Catches (Tt)</th>
<th>Aquaculture (Tt)</th>
<th>Imports (Tt)</th>
<th>Total Supply (Tt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,770,459</td>
<td>170,890</td>
<td>1,210,874</td>
<td>3,152,224</td>
</tr>
<tr>
<td>2009</td>
<td>213,597</td>
<td>179,974</td>
<td>1,972,941</td>
<td>2,316,512</td>
</tr>
</tbody>
</table>
Traditional seafood supply chain in Spain

- **Imports**
- **Auction**
- **Catches**
- **Aquaculture**
  - **Local Retailer**
  - **Local Horeca**
  - **Traditional retailer**
  - **Horeca**
  - **Retail chains**
  - **Distributors**
  - **Horeca**
  - **Final Consumer**

Merca: Public owned network of food wholesale markets located at all the country provinces, providing infrastructures to private wholesalers.

Modern seafood supply chain in Spain

- **Imports**
- **Auction**
- **Catches**
- **Aquaculture**
  - **Local Retailer**
  - **Local Horeca**
  - **Traditional retailer**
  - **Horeca**
  - **Retail chains**
  - **Distributors**
  - **Horeca**
  - **Final Consumer**

- **Increased complexity** made more difficult to track flows and prices for researchers and policymakers.

- **Retail concentration** has increased in the last two decades, but traditional channels and outlets still hold a relevant market share.
Supply of selected wild species (2009)

- Hake: 26.86% Domestic, 73.14% Imported
- Anchovy: 93.31% Domestic, 6.69% Imported
- Sardines: 66.89% Domestic, 33.11% Imported
- Mackerel: 61.93% Domestic, 38.07% Imported
- Blue whiting: 60.46% Domestic, 39.54% Imported

Supply of selected farmed species (2009)

- Salmon: 0.48% Domestic, 99.52% Imported
- Trout: 5.78% Domestic, 94.22% Imported
- Mussels: 1.74% Domestic, 98.26% Imported
The prices of species with large amounts of imports have decreased or moderately increased even in periods of shortage in local supply.

Retail prices experimented less variations that producers’ or wholesalers’.

The evolution of prices in farmed fish species significantly diverge from that of mussels. Price transmission appears to better work in fish than in molluscs.

Lower volumes of trout imports prevented local producers to rise their prices in a larger amount like it seems that have happened at the international market.
Value added by wholesalers is bigger for species with low levels of imports. All these species show a decrease in retailers’ contribution to final product value.

Value added by retailers has increased in species with large amount of imported supply while decreased otherwise.

- Direct access to imports enlarges wholesalers’ contribution to final product value.
- Value added by wholesalers increases along time in almost all species, with the exception of hake. This is due to more stable prices of imports.
Wholesalers contribution is lower in farmed fish species than it is in wild fishery. And they are losing importance.

Mussels differ from trout and salmon in an increasing larger contribution to value from wholesalers.

Backward integration in the supply chain increases considerably retailers’ profits but...
Wholesalers’ pricing policies contribute to stabilize retailers’ profits and reduce risk. Hake improve both in profit and volatility.

… increases also volatility for some species like anchovy and blue whiting. Other like hake improve both in profit and volatility.

Wholesalers’ pricing policies contribute to stabilize retailers’ profits and reduce risk.

Gross profit. Aquaculture.

- Retailers increase their profits by backward integration in a larger amount for trout and mussels than for salmon.
- Increased profits due to retailers’ access to producers are lower that in wild fishery products.
By direct accessing local farmers, retailers also reduce volatility of profits.

No significant improvements are observed in the case of salmon.

**Summary**

- **Imports prevent the rise of prices of wild fishery products.** Products with a large ratio of imports decrease or stabilize their price. This effect may benefit traders and consumers, but negatively affect fishermen’s income.

- **Prices** have shown to be less volatile for retailers than in any other stage of the chain for all species observed. The consequences are improved returns when local an imported species decrease their price, but reduced profits in species with increasing prices.

- **Value added by wholesalers** is bigger in species with large dependence of local catches. But it differs significantly from one species to another. Evolution in time also differs improving profits in some cases and worsening in other.

- **Value added by retailers** have increased in species with large shares of imports and decreased at different rates in species dominated by local catches.
Summary. Backward integration of the supply chain

- Wholesalers' direct access to imports increase their contribution to product value. But this is limited to the availability of species and it may have caused reductions in price and value with some imported products.

- Backward integration by retailers results in considerably larger profits in almost all cases. Some species also result in increasing returns, but other would reduce retailers' profits along time and enlarge volatility and risk.

- Direct access to aquaculture producers by retailers improves profits in locally produced species, but results in low differences or even decreases in imported species.

- When considering backward integration retailers must balance profit versus volatility and risk. Some species like hake and local aquaculture provide both goals. Some other like anchovy and blue whiting will result in less volatility if purchased to wholesalers.

Thanks for your attention

Boats on a sea fishing. Roman early empire 200 – 300 AD.
Archaeological Museum, Sousse, Tunisia